

XLI. *Monograph on the Genus Campsosternus of Latreille.*
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[Read 2d August, 1841.]

LATREILLE, in the "Annales" of the Entomological Society of France, first separated *Elater fulgens* of Fabricius from other *Elateridæ*, and applied to it the name of *Campsosternus*. He appears to have been unacquainted with other species, as no mention is made of them, and from his short published characters it might almost be inferred that he hesitated in detaching it from the magazine genus *Ludius*, unless, perhaps, he intended at a future time more fully to detail them. Of late years our acquaintance with the East Indian forms of insects has greatly increased, and amongst the numerous additions to the *Coleoptera* of that magnificent continent, some *Elaters* closely allied to *fulgens* of Fabricius have enriched our collections. In my late visit to Paris I observed some undescribed species, and possessing several others of great beauty and metallic splendour, I now describe and submit them to the notice of the Entomological Society.

Elater contrasted with *Buprestis* can scarcely pretend to vie with the latter family in metallic splendour, or in the various colouring of the species; in magnitude, however, *Tetralobus* surpasses the former. With regard to the distribution of the species of *Campsosternus*, it appears to be altogether an Oriental genus, and is confined almost to China, the East Indies, and the neighbouring islands. In the present monograph fourteen species are described, and there can scarcely be a doubt that many others, closely allied to those in the following pages, will yet be discovered in the same regions. It is scarcely necessary to add, perhaps, that little is known respecting the larvæ of these gigantic insects; and it is solely with the hope of directing the attention of our English naturalists in the East to these magnificent insects, that I have taken them up at present. Any information respecting their habits is much wanted; should they turn out upon investigation only half as destructive as our wireworms in Europe, their ravages would indeed produce most serious consequences. I am inclined to consider them rather as living on the vegetation of trees and shrubs, than on herbage. This point at present is not satisfactorily ascertained, and any information respecting their larvæ and habits (which appear to be unknown) is much desired. In concluding these brief remarks on the genus *Campsosternus*, I

think it necessary to detach it from Monsieur Latreille's magazine genus *Ludius*, and regard it as belonging to a family of the *Elateridae*, which is peculiar to the East Indies. After a short period I hope to add various remarks relating to these insects, as some valuable notes, written in India, on their general natural history, are now on their way to me in England. At the same time, also, I propose examining our rich metropolitan cabinets, in order to make the monograph as perfect as possible; a supplement therefore will be forwarded to the Society as soon as possible.

If any gentleman present is acquainted with any undescribed species belonging to the above genus, the loan of them is requested for examination.

CAMPSOSTERNUS,* Latreille.

For the generic characters, see Latreille's Memoir in the French Entomological "Annales."

The following short Latin characters may be added to those of Latreille:—

"Scutellum reverso-cordatum, antice emarginatum, postice latius truncatum. Thorax trapezoidalis elevatus, angulis posticis obliquis, longitudine latitudini æquali. Prosternum antice declive foveâ transversâ impressum."

Sp. 1. Type of the genus *Elater fulgens* of Fabricius.

E. cyaneo-nitidus, subtus cupreus, elytris acuminatis. Vide Fab. Ent. Syst. 2, 220, 22.

Long. lin. 20, lat. lin. 5½.

Habitat in Chinâ.

Elater fulgens, Oliv. Ent. pl. 4, fig. 43.

"E. violet, très-brillant en dessus, cuivreux en dessous; côtés du corselet verts."

E. supra violaceus nitens, infra cupreus, thoracis lateribus viridibus. *Elater auratus*. Drury, Ill. of Ins. tom. 2, pl. 35, fig. 3.

Antennæ nigrae, filiformes, subserratae, thoracis longitudine.

Thorax lævis, violaceus nitens, lateribus viridibus. Elytra lævia violacea, apice acuta. Corpus subtus pedesque cuprei nitidi.

* From *καμπω* and *στερνον*.

Sp. 2. *C. sumptuosus*, Hope.

Aurato-viridis, nitidus, capite antice subfoveo lato. Thorax marginibus elevatis, emarginatus, antice convexus, postice in medio protensus, lobo ad scutellum extenso, lineâque longitudinali fortiter impressus. Elytra aurato-viridia, acuminata, glabra, nitida, et punctulata. Corpus infra concolor, ultimo segmento abdominis roseo colore tincto.

Long. lin. $14\frac{3}{4}$, lat. lin. 5.

Habitat in insula Javana?

The above species I described from the rich collection of Monsieur Dupont at Paris, and although the locality mentioned is the island of Java, I am inclined to suspect its true locality is Manilla, as one specimen in the Parisian cabinet is labelled from thence; its range however may be equally extensive with other *Colcoptera* of the east.

Sp. 3. *C. Aureolus*, Hope.

Metallico-viridis, roseoque colore tinctus. Caput antice punctulatum, antennis nigricantibus, articulis compressis. Thorax vix subconvexus, parum depressus, lateribus elevatis, tenuissime punctulatus, postice lobo ad scutellum protenso. Elytra viridia, acuminata, striato-punctata, striis haud fortiter impressis. Corpus infra concolor subpubescens, pedibus piceo-tomentosis, femoribus pallidioribus.

Long. lin. $14\frac{1}{4}$, lat. lin. 4.

Habitat circa Singapore.

A variety of this species, in M. Dupont's collection at Paris, I named *Calanus*. As I have since seen many other varieties, the latter must be abandoned, as there cannot exist a doubt of its identity with *aurcolus*. The above species is named *aureolus* in Griffiths' "Animal Kingdom," and was figured from a specimen in my cabinet; the locality, according to Dupont, is Java, which is probably erroneous. Some individuals I have received from the Tenasserim coast.

Sp. 4. *C. Cantori*, Hope.

Corpus supra et infra æneum, thorace marginato et tomentoso, elytris acuminatis nitidis. Caput inter oculos excavatum, antennis palpisque nigricantibus. Thorax convexus, lateribus elevatis et roseo-cupreis, disco tomentoso et subtilissime punctulato. Elytra acuminata, ænea, substriata, sublente

tenuissime punctulata. Corpus infra æneum, roseoque colore tinctum, pedibus concoloribus.

Long. lin. $22\frac{1}{2}$, lat. lin. $6\frac{1}{2}$.

Habitat in agro Assamensi.

The above insect appears to be the largest of the genus hitherto received from the East Indies. It was brought to this country from Assam by Dr. Cantor the erpetologist, and was presented to me by that individual, with several other nondescripts from the same locality: it is named in honour of that able zoologist.

Sp. 5. *C. Latreillii*, Davaucel.

Purpureo-viridis. Caput antice excavatum. Thorax in medio convexus, purpureus, lateribus utrinque subdepressis roseoque colore tinctis, marginibus externis elevatis. Elytra viridia, purpureo colore tincta, glabra, tenuissime punctata. Corpus infra aurato-viride, nitidum, pedibus obscurioribus et subtomentosis.

Long. lin. $15\frac{1}{4}$, lat. lin. 5.

Habitat in Cochín China; e Museo Dom. Dupont.

The above insect was collected by Monsieur Duvaucel in his voyage to China. The name of Latreille was probably given it by the Baron De Jean. [A species thus named is described by M. Guérin Méneville, in the Voyage of M. Delessert, p. 37.]

Sp. 6. *C. Wilsoni*, Hope.

Aurato-viridis, lateribus thoracis subroseo-tomentosis, elytris viridioribus. Caput inter oculos excavatum, pilosum, antennis atro-violaceis. Thorax subconvexus, punctulatus et tomentosus, medio viride, lateribus æneis, roseoque colore tinctis, marginibusque elevatis. Scutellum æneum, postice rotundatum. Elytra viridia, acuminata, lateribus auro-fluentibus. Corpus infra roseo-metallicum, mesosterno cyaneo, femoribus et tibiis violaceo-æneis, subpilis et punctulatis, tarsis unguibusque cyanescentibus.

Long. lin. 18, lat. lin. $3\frac{3}{4}$.

Habitat in Maderaspātana.

The above insect I have received from Madras and the Nilgherry Mountains, it is probable also that its range extends far into Bengal: it is subject to vary much in size; the largest specimen of my collection is the one above described.

Sp. 7. *C. smaragdina*, Hope.

Viridis, præcedenti affinis, at minor. Caput inter oculos excavatum, subrugosum, antennis palpisque nigro-violaceis. Thorax convexus, lateribus externis elevatis, angulisque posticis valde acutis. Scutellum nigro-æneum, postice rotundatum. Elytra atro-viridia, sub lente subtilissime punctulata, apicibus acutis. Corpus infra cyaneo-viride, femoribus tibiis violaceis, tarsisque atro-piceis.

Long. lin. 14, lat. lin. $4\frac{1}{2}$.

Habitat in Maderaspatana.

In Mus. Dom. Hope.

The above species was received from Madras. It appears to be unknown to the continental Entomologists, and is unique in my collection.

Sp. 8. *C. Guérinii*, Hope.

It is probable that this species will be described by Monsieur Guérin under the name of *Delessertii*. I therefore do not give its description at present. [P.S. It is now described under the latter name by M. Guérin, in the Voyage of M. Delessert, p. 38.]

Sp. 9. *C. Duponti*, Hope.

Viridis. Caput subfoveolatum, punctatum. Thorax antice convexus, lobo ad scutellum extenso, angulis lateralibus subdepressis. Elytra acuminata, viridia, tenuissime punctulata. Corpus infra subaurato-viride, pedibus obscurioribus.

Long. lin. 12, lat. lin. $3\frac{1}{4}$.

Habitat in Agro Malabarensi.

The above insect was described by me from the collection of Monsieur Dupont, during my late sojourn in Paris, and is named after that zealous collector.

Sp. 10. *C. rosicolor*, Hope.

Puniceo-viridis roseoque colore tinctus. Caput antice excavatum et punctulatum. Thorax vix convexus, punctatus, postice subprotensus, roseus. Elytra acuminata, striato-punctata, striis punctisque fortiter impressis, suturâ marginibus externis elevatis et roscis. Corpus infra viride,

punctatum, subroseo colore tinctum, pedibus flavo-testaceis, tarsis obscurioribus.

Long. lin. $11\frac{1}{2}$, lat. lin. $3\frac{1}{4}$.

Habitat in Java.

This elegant species was described from the rich collection of Monsieur Dupont at Paris.

Sp. 11. *C. Proteus*, Hope.

Corpus supra et infra aurato-viride. Caput inter oculos subexcavatum, antennis nigricantibus. Thorax convexus, sub lente subtilissime punctulatus, lateribus externis elevatis, disco postice sublobato, versus scutellum protenso et parum elevato. Scutellum antice et postice rotundatum. Elytra aurata, splendida, lateralibus marginibus elevatis, sutura violacea, apicibusque acuminatis. Pedes virides, tarsis unguibusque piceis.

Long. lin. 16, lat. lin. 5.

Habitat in Manilla.

The above species is very variable in size and colour, and several specimens differ considerably in form: I have therefore named it *Proteus*; some of the varieties are blue, green, golden, and bronzed; they were brought to this country from the Manilla Isles by Mr. Cumming, and appear to be exceedingly abundant as well as variable. It is probable that two or three species may be confounded under the name of *Proteus*.

Sp. 12. *C. Stephensii*, Hope.

Long. lin. 14, lat. lin. 4.

Vide my description of this species in General Hardwick's collection, in the Zoological Miscellany.

Sp. 13. *C. Leachii*, Hope.

Chalybeo-viridis, thorace cærulescenti, clytrisque acuminatis et æneo-virescentibus. Caput inter oculos subexcavatum, antennis atro-violaceis. Thorax in medio parum convexus, lateribus externis marginatis, angulis posticis acutis. Elytra thorace convexiora, viridia, apicibus acutis, lateribusque elevatis. Corpus infra cærulescens seu aurato-violaceum, femoribus tibiis concoloribus tarsisque obscurioribus.

Long. lin. 17, lat. lin. $5\frac{1}{2}$.

Habitat in India Orientali circa Singapore.

The present species diverges from the Latreillian type. It is more robust in form and has the thorax and elytra considerably depressed; by some persons it would be regarded as a subgenus. It has been in my collection some years, and was named in honour of my friend Dr. Leach.

Sp. 14. *C. Eschscholtzii*, Hope.

Affinis præcedenti, at totum corpus supra et infra chalybeo-violaceum. Caput inter oculos vix foveolatum, antennis atro-violaceis. Thorax depressus, vix convexus, lateralibus marginibus valde elevatis, angulis posticis parum latioribus et acutis. Elytra chalybeo-violacea, splendida, sub lente tenuissime punctulata, marginibus externe elevatis. Pedes violacei, tarsi infra piceis capillis obsitis.

Habitat in Manilla.

The above species is named after Dr. Frederick Eschscholtz, and is closely allied to *Leachii*; it was brought to England by Mr. Cuming the conchologist, and appears to be taken in Manilla in extraordinary numbers.
